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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,446	07/30/2001	Katsumi Kose	7154	8901

7590 05/07/2004

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EXAMINER

SMITH, RUTH S

ART UNIT PAPER NUMBER

3737

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,446

Applicant(s)

KOSE, KATSUMI

Examiner

Ruth S Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

Claims 7-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the paper filed April 13, 2004.

Claim Objections

Claims 1-6 are objected to because of the following informalities: In claims 1-6, the term "improved" should be removed from the preamble. It is unclear as to whether applicant is intending to set forth a Jepson-type claim. In claim 2, "the gradient coil" lacks antecedent basis. In claim 3, "said RF probe box" lacks antecedent basis. In claim 4, "said RF probe open-bore" lacks antecedent basis. In claim 5, "material is" should be "materials are". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Taicher et al. The claim is directly readable on Taicher et al which discloses a compact magnet and RF coil (see figure 9). The claim fails to positively set forth the reference materials and the structure disclosed is capable of accommodating a heel and reference materials.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taicher et al in view of Matsunaga et al or Schenck et al. Taicher et al disclose a compact magnet, gradient coils and RF coil (see figure 9). It is well known in the art to shield the gradient coil from the RF coil in order to prevent the fields from the coils from interfering with one another. Examples of such are seen in Matsunaga et al and Schenck et al. It would have been obvious to one skilled in the art to have provided a shield between the RF coil and the gradient coil as such is a well known expedient in the art. In the absence of any showing of unexpected results, the specific arrangement of the shield used would have been a matter of ordinary engineering design choice of known equivalents in the art. With respect to claim 3, in the absence of any showing of criticality, the shape of the opening in which the extremity is placed would have been an obvious matter of design choice based upon the size of the extremity being scanned.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taicher et al in view of Matsunaga et al or Schenck et al as applied to claim 2 above, and further in view of Brown. Brown discloses an MR system that analyzes bone content by comparing data measured from a bone to data measured from a reference material scanned simultaneous to the bone. The reference material is flexible. The material, when placed in the bore of the magnet would inherently provide a support pad. It would have been obvious to one skilled in the art to have further modified Taicher et al such that a flexible pad is placed around the heel of the patient during scanning such that the data obtained from scanning the heel can be compared with a known standard for diagnostic purposes.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taicher et al in view of Wehrli et al. Wehrli et al disclose a method of diagnosing osteoporosis using MRI which includes the use of spin-echo pulse sequences. The use of such pulse sequences are old and well known in the art. It would have been obvious to one skilled in the art to have modified Taicher et al such that it includes spin-echo pulse

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sequences. Such a modification merely involves the selection of a known data acquisition pulse sequence based upon the intended use of the device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reynolds et al disclose a device for imaging a foot using MRI. Rapoport et al disclose a compact magnet for examining an extremity of a patient. Vogel et al disclose a device for examining a heel to determine the BMD in a patient.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S Smith whose telephone number is (703) 308-3063. The examiner can normally be reached on M-F 5:30 AM- 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ruth S Smith
Primary Examiner
Art Unit 3737

RSS